

FARM IRRIGATION RATING METHOD – FLORIDA (FIRM-FL) VERSION 1.0

Workbook Purpose and Description

The primary goal of the Farm Irrigation Rating Method – Florida (FIRM-FL) is to provide a tool to: (1) plan with the landowner on farm irrigation improvements to achieve a specific level of water management and conservation and (2) determine the amount of water conserved when a practice or group of measures is installed.

The potential for improving systems for more efficient water use can be determined by field investigations. The challenge is to develop a viable method for comparing the present irrigation system and management to feasible modifications which result in more efficient irrigation system and improved management. A rating system is needed because complete field evaluations are sometimes unavailable. FIRM-FL was developed using published data for most factors and estimates based on field experience for others. FIRM-FL is not intended to replace irrigation system evaluations but is to be used as a tool in determining how the irrigation system and management can be improved.

Workbook Documentation

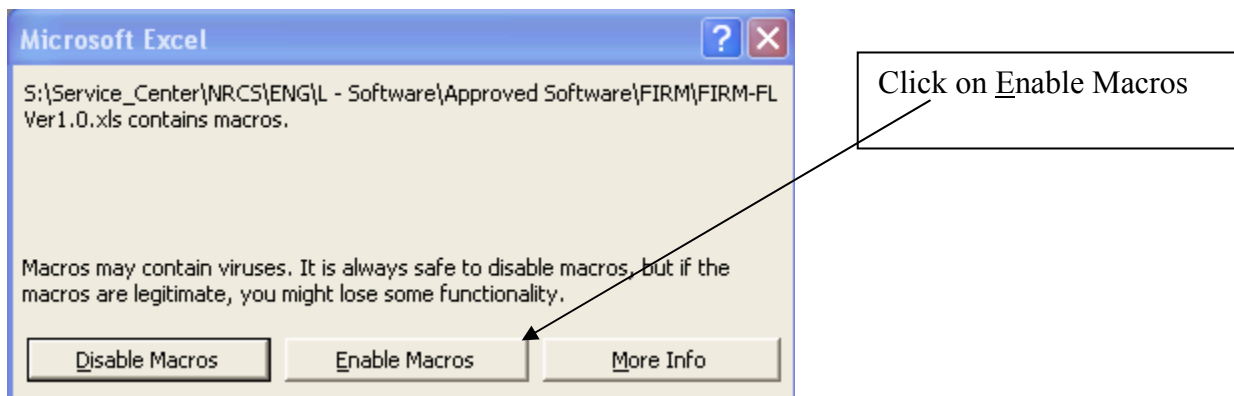
FIRM-FL is a Microsoft Excel® workbook developed to rate a solid set sprinkler system. This workbook is based upon the Farm Irrigation Rating Method – Florida (FIRM-FL) procedure located in Part 652 National Engineering Handbook, Chapter FL15, Resource Planning and evaluation Worksheets.

Software Requirements

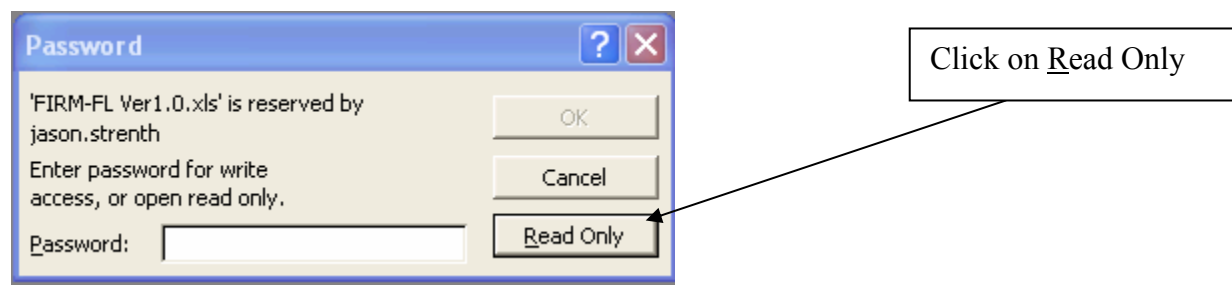
Use of this workbook requires that Microsoft Excel® be installed. This workbook works with Microsoft Excel® 97 or later. The user should have a basic understanding of Excel®.

Installing the Workbook

Place FIRM-FL workbook in the appropriate directory. Open the workbook by double clicking on the file or through the Excel program. Upon opening this workbook, a dialog box will appear. The “enable macros” button must be clicked in order to use this workbook accurately.



Another dialog box will then appear; the user then selects the “read-only” button. This option allows user inputs, however, it prevents the overwriting of the original file by requiring the user to save the file as a different name.



The program is password protected. The user may modify any value in a yellow cell. Since this workbook is protected, only the values in the yellow cells may be modified.

Using the Workbook

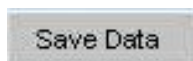
The program includes two sheets. The first worksheet contains the instructions and the second worksheet contains the actual program that is used to input the data and compute the rating.

Instructions - This worksheet contains these instructions in a printable pdf format.

FIRM-FL - Enter the farm and location data in the first section of the worksheet FIRM-FL. To enter the management and system factors, click in the cell and choose the appropriate factor. Note that each type of irrigation system requires different system factors. The required factors for the selected irrigation system are indicated with a “----->” adjacent to the data entry cell.

Save Data

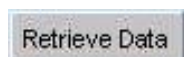
“Save Data”



Click the “Save Data” button to save the worksheet data. The data will be saved as a data file with a .fir extension. When prompted choose the folder location and use the default file name or enter a different file name. The user must select the drive and file folder where the data file is to be saved. Use this command to save all data for later use using the “Retrieve Data” button. Saving data this way will conserve disk space.

Retrieve Data

“Retrieve Data”



Click the “Retrieve Data” button to retrieve previously save worksheet data. After clicking “Retrieve Data” you will be prompted for the folder location and file name. Double-click on the file and the data will be automatically inputted into the worksheet. The data can be edited as

Output

The FIRM-FL output can be printed using the Excel print command.

References

Part 652 National Engineering Handbook, Chapter FL15, Resource Planning and evaluation Worksheets

Disclaimer

The USDA NRCS cannot assume liability for the use or maintenance of this workbook or any results it may produce.

NOTE: Excel is a copyright of Microsoft Corporation. Screen shots reprinted by permission from Microsoft Corporation.